CLINICAL CONFERENCES

From the Ward Rounds of the Stanford University Surgical Service at the San Francisco County Hospital, June 28, 1946

Case Number 1. Presentation by house officer, Dr. James J. Hamilton: This 25-year-old Mexican woman, separated from her husband, was well until she fell down six steps on June 6, 1946. She struck her right side just below the rib margin. Bundles, weighing approximately ten pounds landed on the anterior abdominal wall. Right upper quadrant pain caused her to lie on the steps for several minutes. The pain was moderately severe and radiated across the upper abdomen. That afternoon she passed clotted, bloody, vaginal discharge. She entered the ward on June 7, complaining of pain and tenderness, nausea and vomiting and bloody vaginal discharge, all of about 12 hours' duration.

At physical examination the uterus was felt to be enlarged to the left. A fetal heart was heard at 128 beats per minute. There was tenderness over the entire abdomen, more marked in the right lower quadrant.

LABORATORY EXAMINATION

Urinalysis showed 4 plus acetone; no sugar; 4 to 8 white blood cells per high dry field; no red cells. The hemoglobin was 85 per cent; white blood count 22,000 with 93 per cent polymorphonuclear cells.

At 11 p.m., June 7, the tenderness was more marked, chiefly just to left of the umbilicus. The fetal heart was not heard. The cervix admitted one finger. There was marked tenderness in the culdesac not noticed on previous examination.

June 10, the fetal cord prolapsed. Labor was induced with Vorhees' bag. Delivery occurred early on morning of June 11. Vomiting and tenderness persisted. One June 13, the abdomen was distended, the stools were liquid, there was modrate edema of the chest and back. A Wangensteen suction tube was inserted. On June 18 she began to pass bile stained lochia. Jaundice developed and has persisted to the present date.

On June 24, aspiration taps made bilaterally in the lower abdomen showed fluid from which B.coli was recovered. Later the same day, exploratory laparotomy was done. An abscess of the entire peritoneal cavity was found. There was thick exudate throughout the abdomen. In postoperative blood studies the hemoglobin varied between 75 and 80 per cent and white count between 7,500 and 10,000.

DISCUSSION

*Dr. Roy Cohn:** We still do not know the answer to this patient's problem. When first seen by the surgical service, three days after entry, she was extremely ill, with signs and symptoms of generalized peritonitis. We presumed this to have been due to a ruptured viscus which occurred either at the time of injury or secondary to instrumentation. Because of the severity of her illness, the conservative treatment of generalized peritonitis was continued. She seemed to hold her own and gradually localized a large fluid collection in the anterior mid-belly, non-tender to palpation. At this time the patient began having frequent thin bowel movements as if an abscess had ruptured into the colon. With great care the left side of the abdominal fluid collection was aspirated. The same type of fluid that the patient was passing by rectum was obtained. It became obvious that this fluid collection was actually an abscess and not a collection of bile.

Using local anesthesia, the abdomen was opened over the abscess and a large abscess filled with thin brownish B.coli fluid was evacuated. The walls were made up of the intestines which were matted together. The pelvic viscera were covered with fibrin but otherwise appeared normal. No source for the abscess was noted.

Since operation, the patient has been improving. Her temperature has fallen and we have been able to remove the nasal suction for the first time. It is possible that her jaundice was only a toxic hepatitis.

*Dr. C. Mathewson:*** It is very difficult to put this whole picture together, particularly in view of the bile in the lochia and stool and the progressive jaundice. Certainly we may rule out obstructive jaundice. A fall causing sudden compression of the abdomen may result in rupture of the bowel in that portion which contains gas, or the bowel may tear at its peritoneal attachments. Looking back, now that we know that this patient did have an intra-abdominal abscess, it is possible to account for the picture on the basis of a rupture of the liver associated with a rupture of the bowel. She put out large amounts of bile in the stool and lochia and also became progressively more jaundiced.

It is rare to see a patient who has just had an abortion, at which time the uterus is wide open and draining, and one who at the same time has a rupture of the liver and bowel with a free flow of bile into the peritoneal cavity. Assuming that such is true in this case, the appearance of free bile in the lochia and stool is not difficult to explain.

Has she a communication between the bowel, the abscess and the abdominal wound? When I

* Roy Cohn, M.D., Acting Assistant Professor of Surgery, Stanford University School of Medicine.

** C. Mathewson, M.D., Acting Professor of Surgery, Stanford University School of Medicine.

saw her the abdominal wound was draining pure bile with little or no fecal content. If there is a fistula in the bowel, and we must assume that there was in the beginning, it is closing over. Continuity of the bowel has been re-established because she is no longer vomiting, is holding down fluids, passing gas and having regular bowel movements. In the immediate future we should watch carefully to see if she has direct communication between the peritoneal cavity and the liver. Now that she is draining bile freely to the outside, the jaundice should clear up rapidly.

Should an abdominal therapeutic abortion have been done? In retrospect, yes. Assuming that she is suffering with a ruptured bowel and liver, early exploration of the abdomen with proper repair might well have avoided the complications which have developed.

Follow-up note: This patient died suddenly on the evening of June 28. At autopsy it was found that the abscess of the peritoneal cavity was the result of a laceration of the terminal ileum. A second, much smaller perforation was found in the sigmoid colon. This was thought to be secondary to rupture of abscess. There was a toxic hepatitis. The jaundice and the yellow color of the lochia were the result of this. There was no communication between the biliary passages and the peritoneum. A few small pulmonary infarcts were found. These were not considered sufficient to be the cause of sudden death. A satisfactory pathological cause was not evident.

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Case Number 2. Presentation by house officer, Dr. Hamilton: A 57-year-old woman entered Mission Emergency Hospital after 70 hours of severe lower abdominal aching and intermittent cramping with nausea and vomiting. She has had no bowel movement since before the onset of symptoms.

Family history is not relevant.

The past history is important in relation to the present illness. In 1913 a left ovarian cyst and the appendix were removed. In 1919 a hernia was repaired. In 1921 she was hospitalized six weeks for strangulation of the bowel. In 1923 she had a second bowel obstruction. She has had known diabetes for the last ten years. She took 30 units of insulin once a day. The fasting blood sugar level was about 150 mg. per cent. Urine tests for sugar done by the patient were usually yellow. On admission 100 units of regular insulin were given.

Flat film shows dilated loops of small bowel. Laparotomy was done and the obstruction relieved. Since operation the course has been uneventful. There has been no recurrence of obstruction. Within 12 hours following operation, 155 units of regular insulin were given. For maintenance she has had regular insulin, 10 units at noon, and protamine zinc insulin, 30 units at 6:30 P.M. The fasting blood is 129 mg. per 100 cc. of blood.

DISCUSSION

Dr. B. L. Halter:† This patient had been operated on several times. There was a history of chronic bowel obstruction. We were reluctant to treat her conservatively because of the additional problem of diabetes. The use of a Miller-Abbott tube means much wear and tear on the patient and the surgeon, under the best conditions. Because of her severe diabetes it seemed best to get her in proper condition as rapidly as possible and to relieve the obstruction surgically. No person should be denied surgery because of diabetes. In elective cases the diabetes should be primary and the surgery secondary. If the patient is free of acetone, one does not have to worry too much about postoperative complications. The question of the type of anesthesia is important. It is generally believed that any anesthetic can be used. We prefer to use local whenever possible. The difficulty in controlling the diabetes is not completely eliminated at present but is less than it would have been had we tried to treat her conservatively.

Dr. C. Mathewson: I am not in a position to be critical of the judgment used in this case. Generally speaking, a person who has had previous operations for bowel obstruction is a good candidate for subsequent attacks. Once you release the adhesions within the abdomen by surgical means, you may expect new ones to form. It is best to treat this type of recurrent obstruction conservatively whenever possible. However, one must always keep in mind the possibility of strangulation. Such a patient must be kept under constant and careful observation. If the obstruction is not quickly relieved or if there are any signs of localized peritonitis, operation should be performed immediately. Once strangulation has taken place the prognosis is bad unless relieved at once. This patient presented a different problem because of the diabetes. She would have been treated conversatively had it not been for the complicating disease. The fluid loss is often great with the Miller-Abbott tube. This makes control of the diabetes difficult. Surgical relief of the obstruction in this case has met the immediate problem but does not influence the possibilities of future attacks.

Follow-up note: The postoperative recovery of this patient was uneventful. She went home with the diabetes controlled.

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† B. L. Halter, M.D., Clinical Instructor of Surgery, Stanford University School of Medicine.